

THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

033/2B

BIOLOGY 2B

(ACTUAL PRACTICAL B)

(For Both School and Private candidates)

Time: 2:30 Hours

Year: 2022

Instructions

1. This paper consists of **two (2)** questions.
2. Answer **all** questions.
3. Each question carries twenty **five (25)** marks.
4. All writing must be in **blue** or **black** ink **except** drawing which must be in pencil.
5. Cellular phones, and any unauthorized materials are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet (s)



1. You are provided with specimens **A**, **B** and specimen **C**.

Questions:

- (a) Observe carefully the displayed reproductive system in the specimen **A**, then draw a well labelled diagram of the reproductive system only.
- (b) Carefully remove the sepals, petals and completely peel off the stamen tube to fully display carpel of specimen **B**, then draw a well labelled diagram of the carpel.
- (c) State four similar functions performed by reproductive system in diagram 1(a) and the carpel in 1(b). Present your work under criteria shown in the following table:

Table of similarities in 1(a) and 1(b)

S/N Criteria	Similar Functions	
	Reproductive system in 1(a)	Carpel in 1(b)
(i) Reception of gametes		
(ii) Production of gametes		
(iii) Fertilization site		
(iv) Zygote development		

- (d) What is the type of reproduction exhibited by the plant which specimen **C** was taken? Give a reason to support your answer.
- (e) Briefly explain how the specimen **C** is propagated for reproduction of new plant.
- (f) In what ways the products from the specimen **C** is useful to human being. Give three points

2. You are provided with specimens **Q**, **R**, **S** and **T**.

Questions:

- (a) (i) Classify each of the specimens **R**, **S** and **T** to class level.
(ii) State three reasons for placing the specimen **S** to its respective class in 2(a)(i).
- (b) Why is it important to understand the type of classification system used to place specimens **R**, **S** and **T** in their respective groups? Give one reason.
- (c) State three advantages of the members which have been placed together with specimen **R** in the same Class.
- (d) Why specimen **Q** is placed in the Division Bryophyta? Give two reasons.
- (e) Draw a well labelled diagram of specimen **Q**.